Abstract

Title: Postural stability of elite sportswomen - cross-sectional study

Objectives: The aim of this work is to describe and evaluate postural stability in elite women's categories of selected sports specializations. a partial goal is to find out and compare selected parameters of static postural stability of football and volleyball players, both from the perspective of different age categories and from the point of view of the given sports specialization.

Methods: This is a cross-sectional study involving a total of 278 female athletes (67 volleyball players, 211 football players) aged 14 and over. Footscan Balance desk (RSscan International, Belgium) was used to measure static postural stability. Tests were used: narrow stand open eyes, narrow stand closed eyes, stand on right lower limb, stand on left lower limb. The results of individual tests were statistically processed and compared. Statistical evaluation was performed using two way ANOVA test, type III and post-hoc Scheffe test. Statistical significance was determined to be $p \leq 0.05$.

Results: The results of the study showed that footballers have a better level of postural stability compared to volleyball players, and a significant difference was found in all four tests ($p < 0.05$). In terms of age category, youth players generally have better postural stability than adult players. Significant difference was found only in standing with open eyes ($p < 0.05$).

Keywords: balance, tests, women’s volleyball, women’s soccer